Fig. 1

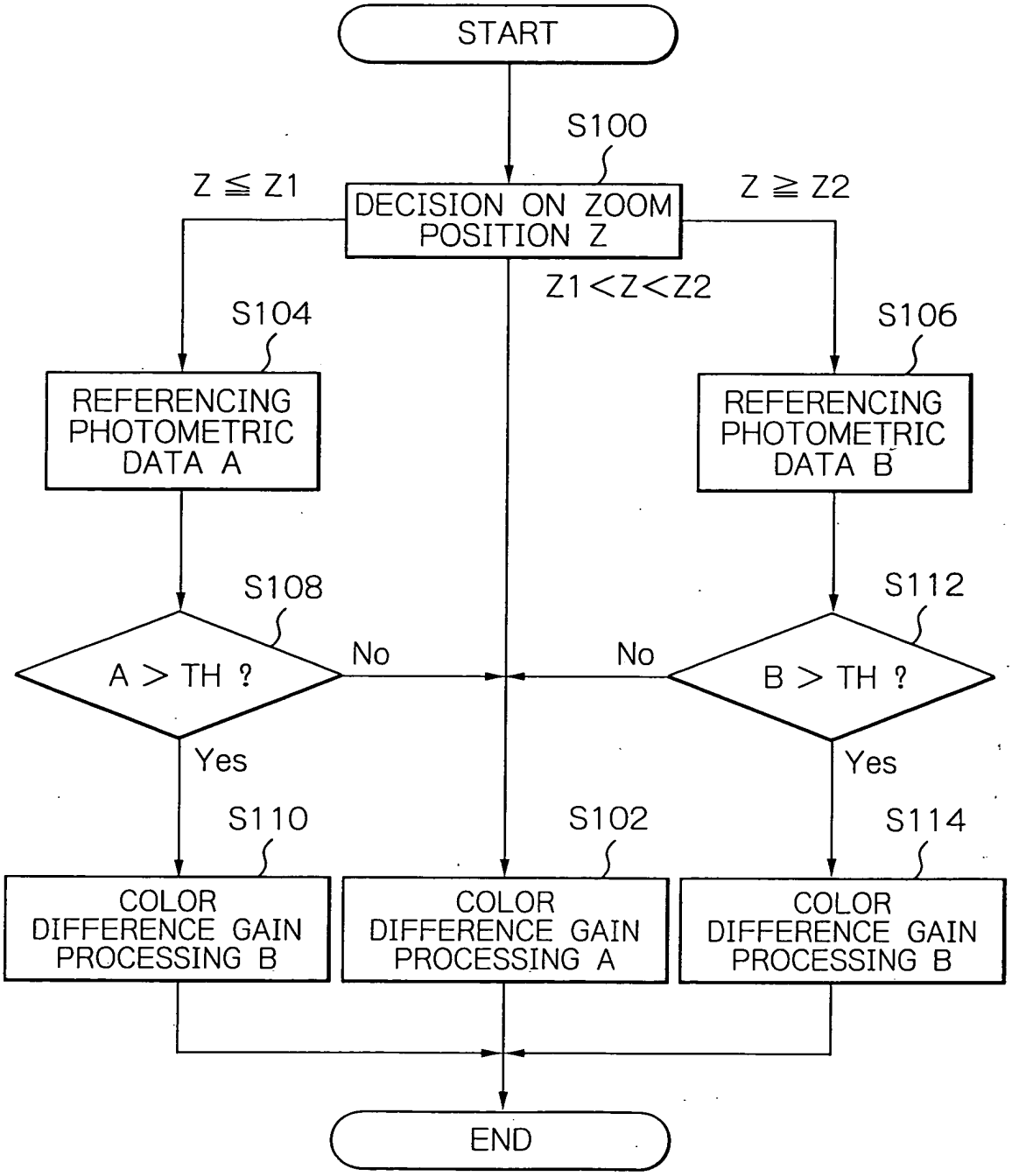

START
S100
DECISION ON ZOOM POSITION Z
Z ≦ Z1
Z1<Z<Z2
Z ≧ Z2
S104
REFERENCING PHOTOMETRIC DATA A
S106
REFERENCING PHOTOMETRIC DATA B
S108
A > TH ?
No
No
S112
B > TH ?
Yes
Yes
S110
S102
S114
COLOR DIFFERENCE GAIN PROCESSING B
COLOR DIFFERENCE GAIN PROCESSING A
COLOR DIFFERENCE GAIN PROCESSING B
END

Fig. 2

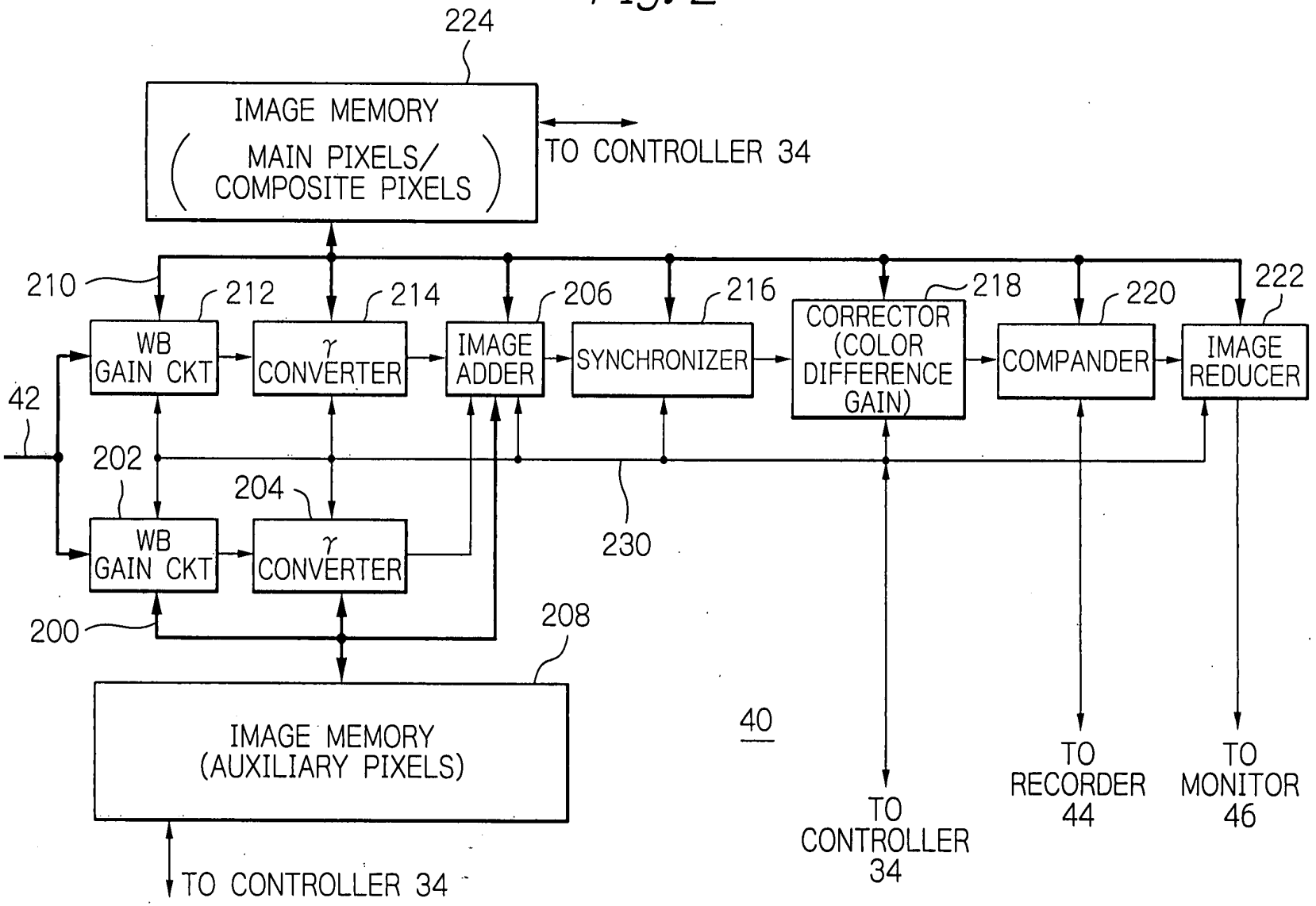

224
IMAGE MEMORY
(MAIN PIXELS/ COMPOSITE PIXELS)
TO CONTROLLER 34
210
212
214
206
216
218
220
222
WB GAIN CKT
γ CONVERTER
IMAGE ADDER
SYNCHRONIZER
CORRECTOR (COLOR DIFFERENCE GAIN)
COMPANDER
IMAGE REDUCER
42
202
204
230
WB GAIN CKT
γ CONVERTER
200
208
IMAGE MEMORY (AUXILIARY PIXELS)
TO CONTROLLER 34
40
TO CONTROLLER 34
TO RECORDER 44
TO MONITOR 46

Fig. 3

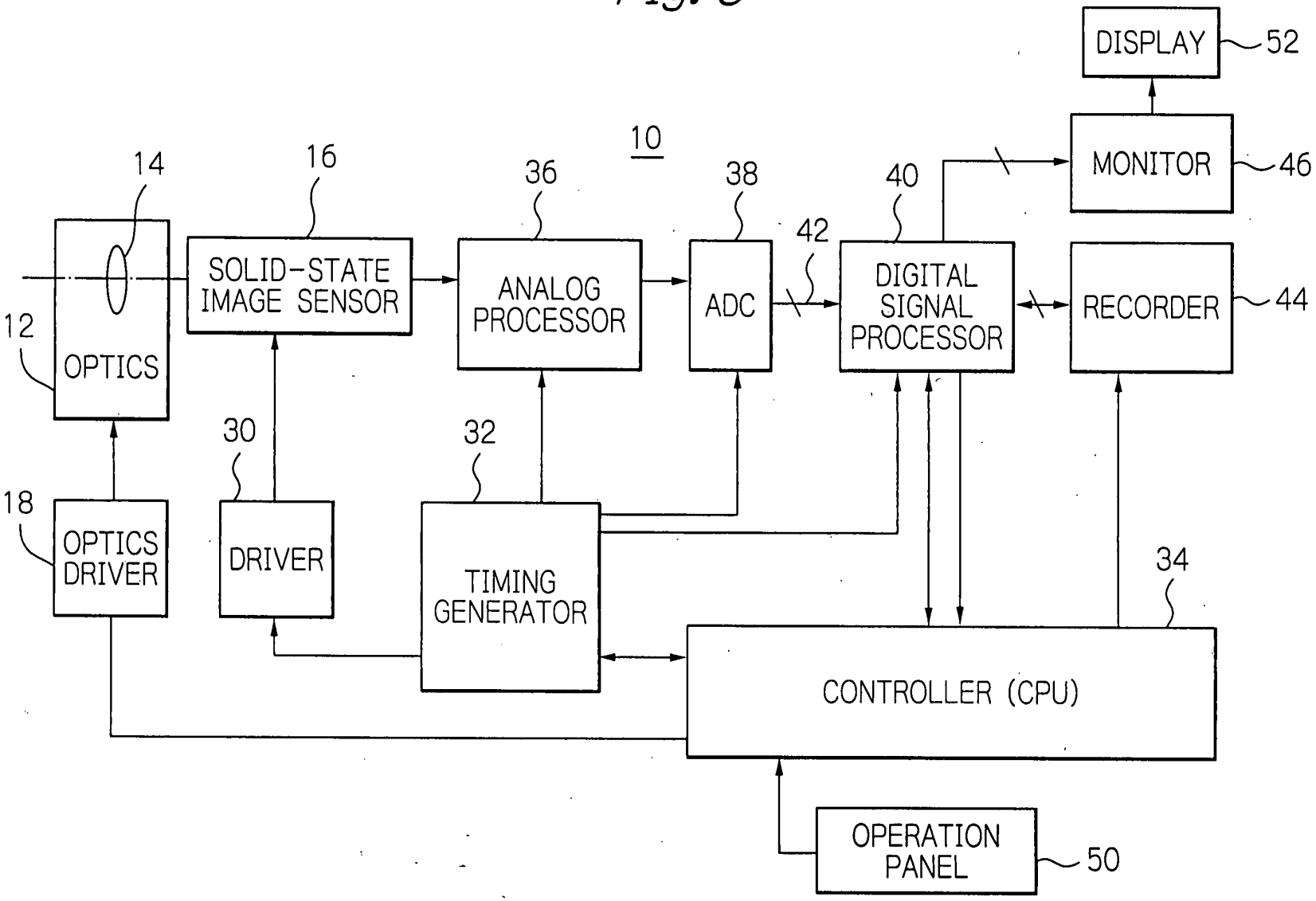

DISPLAY
52
10
MONITOR
46
14
16
36
38
40
42
12
OPTICS
SOLID-STATE IMAGE SENSOR
ANALOG PROCESSOR
ADC
DIGITAL SIGNAL PROCESSOR
RECORDER
44
30
32
18
OPTICS DRIVER
DRIVER
TIMING GENERATOR
34
CONTROLLER (CPU)
OPERATION PANEL
50

Fig. 4

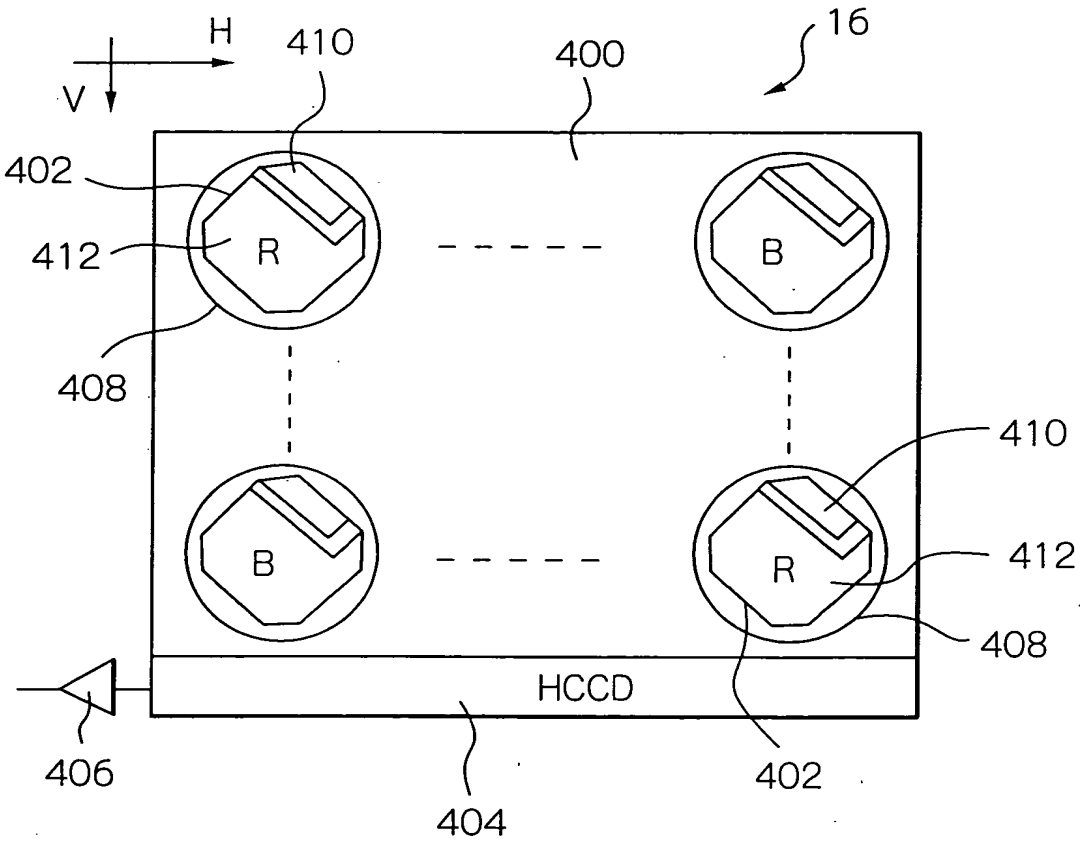


Fig. 5

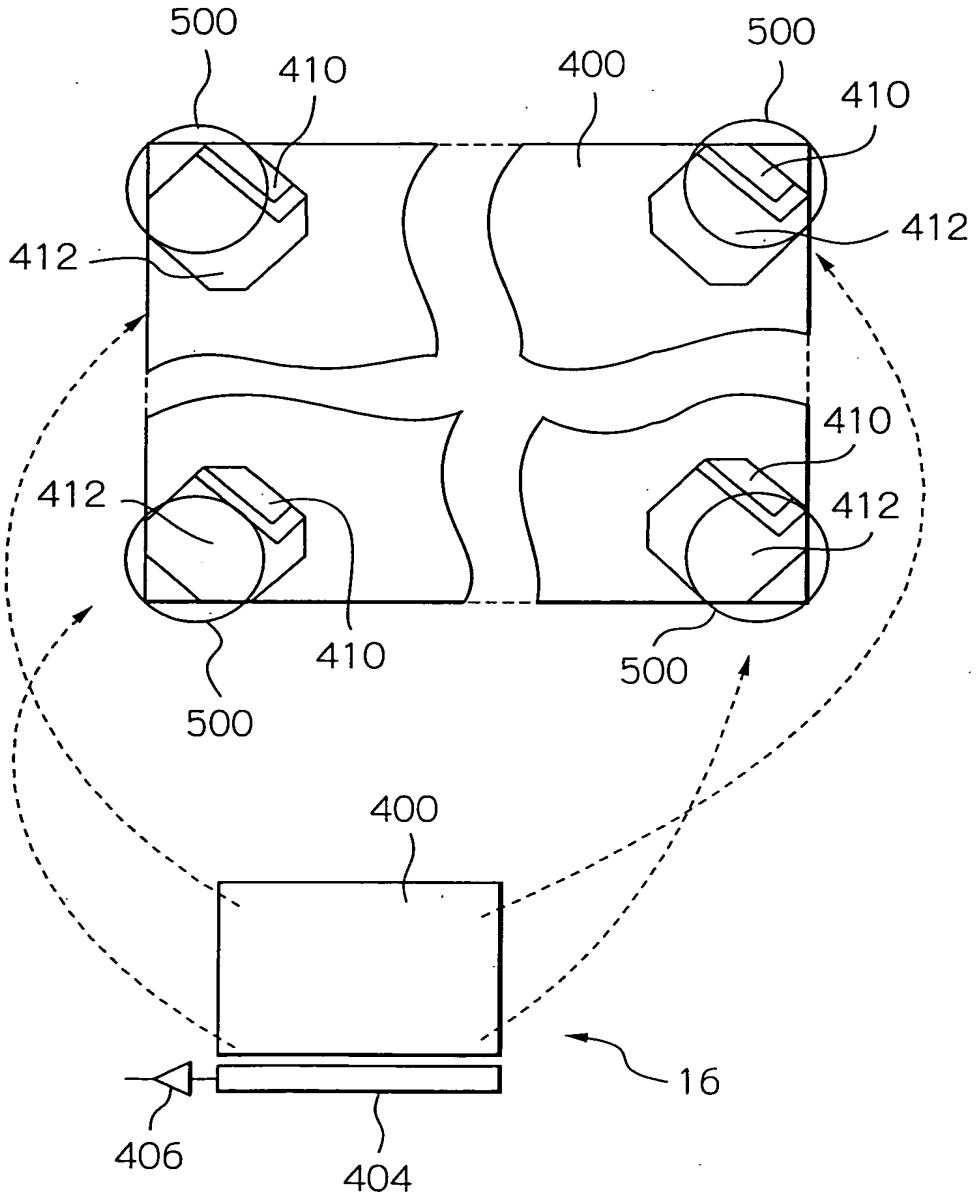

500
410
400
500
410
412
412
410
412
412
410
500
500
400
16
406
404

Fig. 6

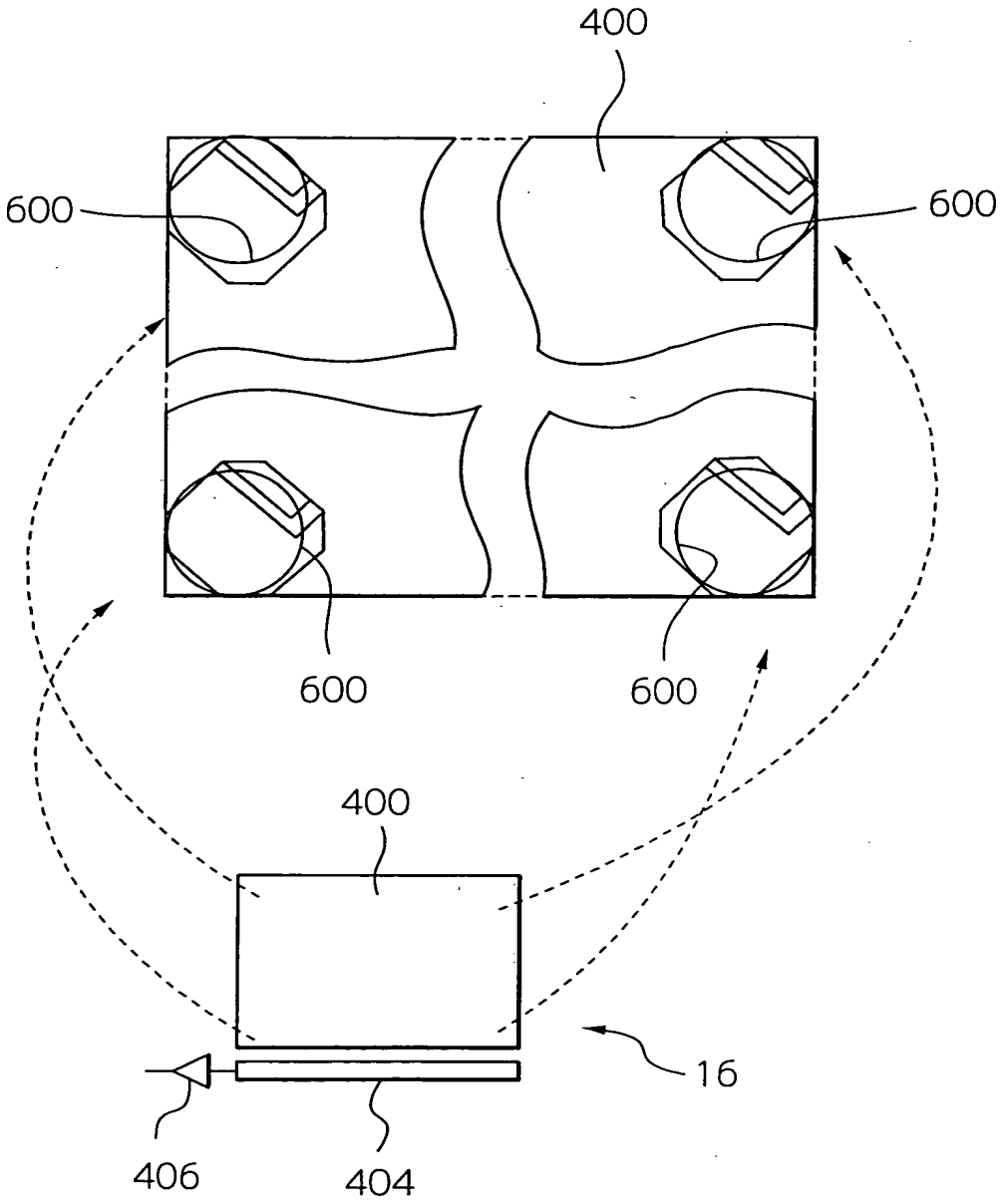


Fig. 7

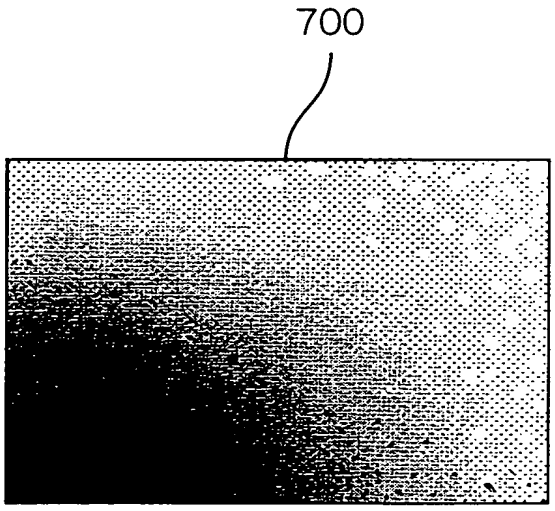


Fig. 8

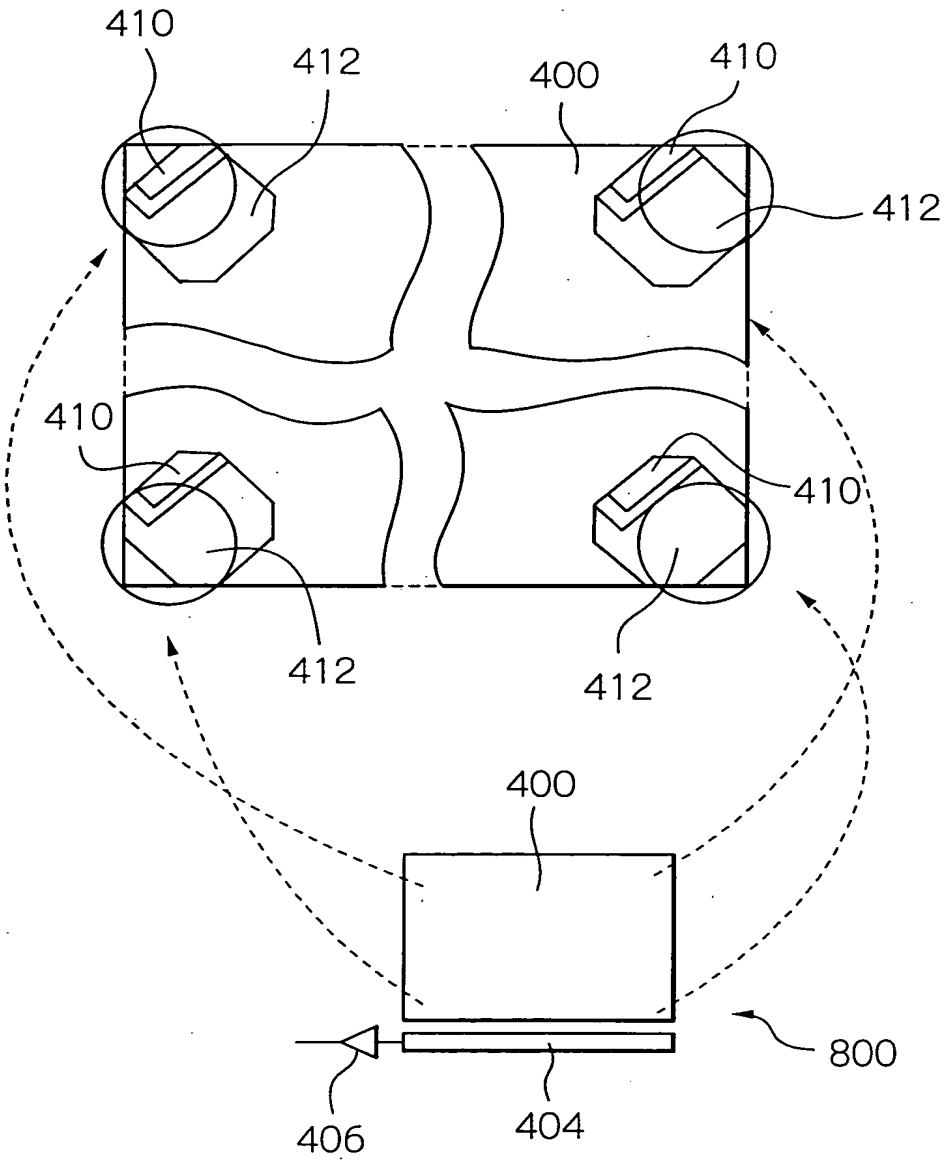


Fig. 9

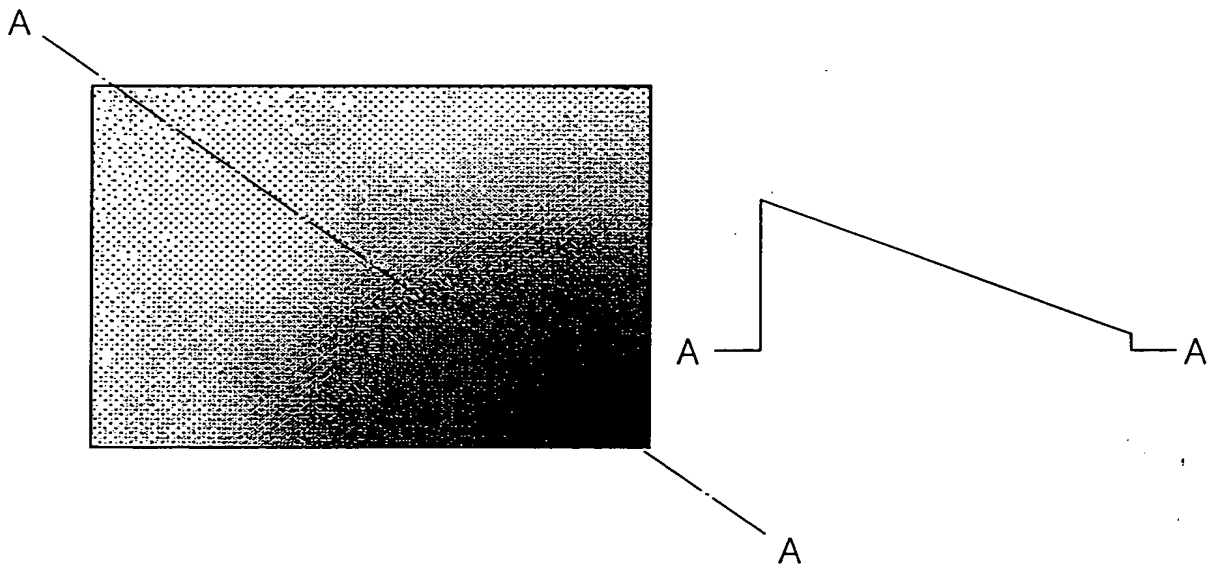


Fig. 10

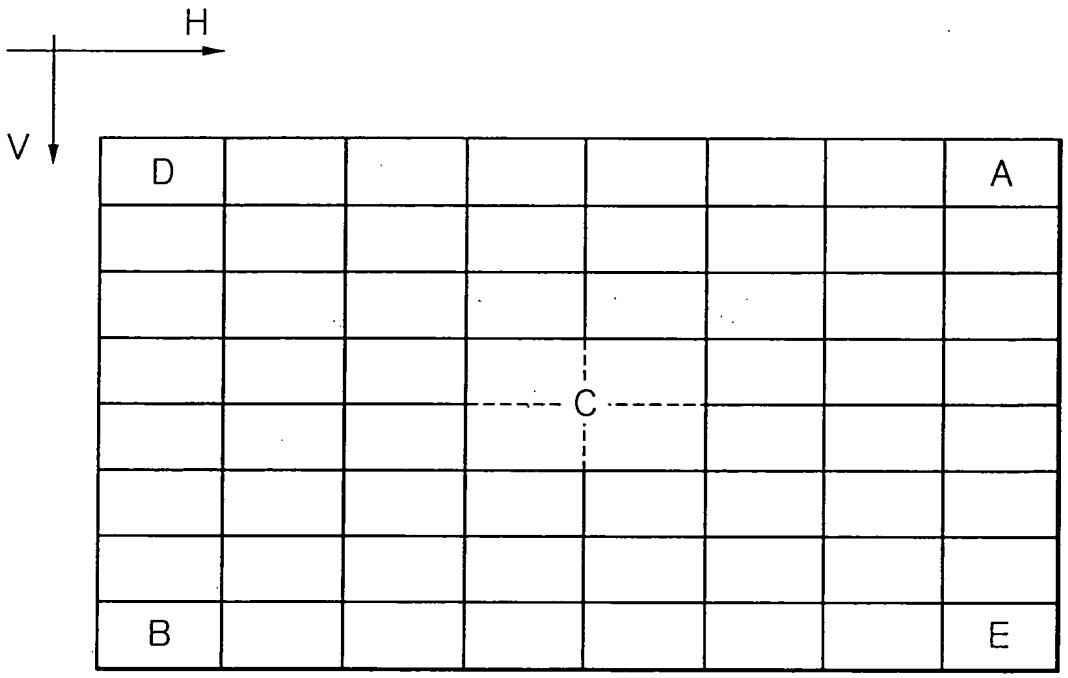
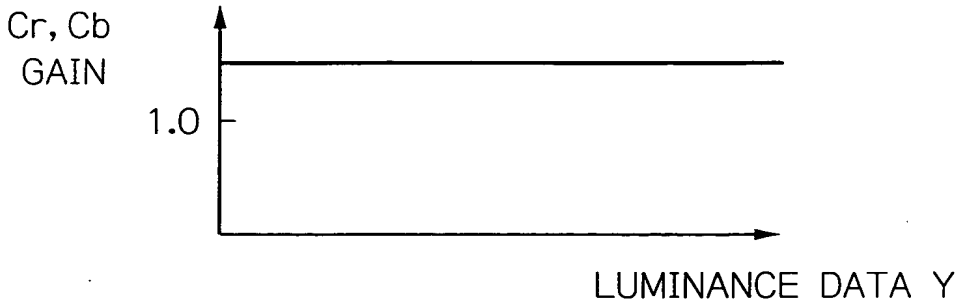
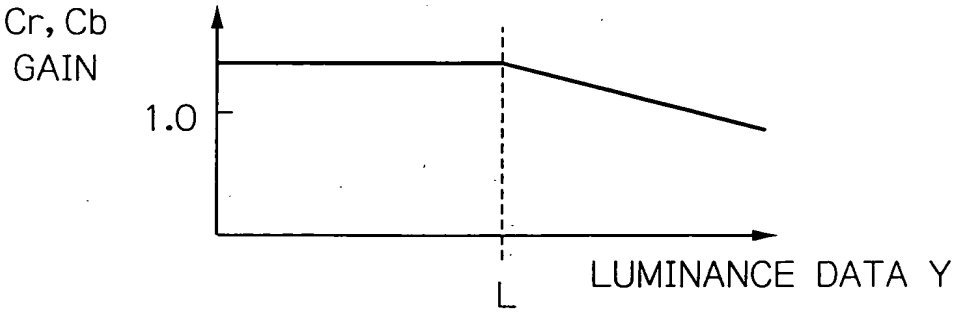


Fig. 11



COLOR DIFFERENCE GAIN PROCESSING A

Fig. 12



COLOR DIFFERENCE GAIN PROCESSING B